This Talk Has Been Gamified!

Jim Whitehead
Professor and Chair, Computer Science
Gamification

The use of game design elements in non-game contexts

Deterding et al., “Gamification: Towards a Definition,” CHI 2011
Finally, you can claim experience points for housework.

Recruit a party of adventurers from your household or office, and whenever one of you completes a chore, you can log it and claim XP.

Find out more.

Username: [ ]
Password: [ ]
Login

Created by Kevan Davis
A mom in Texas describes a typical Chore Wars experience:

“We have three children, ages nine, eight, and seven. I sat down with the kids, showed them their characters and the adventures, and they literally jumped up and ran off to complete their chosen tasks. I’ve never seen my eight-year old son make his bed! And I almost fainted when my husband cleaned out the toaster oven.”

Jane McGonigal, *Reality is Broken*, Chapter 7
Step 1: Define your behaviors

A ~40 person company that sells infrastructure for companies to gamify interactions with employees and customers.

Step 2: Set your real-time user rewards

Standard points-achievements-levels mechanics.

Step 3: Create your User Missions

“Before {Badgeville} Frameworks, businesses had to rely on game design internally to build sustainable gamification programs, limiting ROI, quality, and scalability.”

www.badgeville.com
Multiple reactions:

Does gamification actually work?

Why does this work?

How might we do this better?
Achievement Unlocked
5G - Still Awake After Introduction
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Holding down on text in iOS does not bring up the 'copy' button on jQueryMobile Dialog when using ajax

I am talking about one of these Dialog boxes that pop up: http://jquerymobile.com/test/docs/pages/pagedialogs.html


Click 'Open Dialog' -- on that dialog box, nothing is copy-able in iOS without unless 'data-ajax="false"' is used in the link. (works fine on Android)

Putting '-webkit-user-select: auto!important;' (or 'text' instead of 'auto') does nothing.

Adding the javascript `document.documentElement.style.webkitTouchCallout = "auto;"` does nothing.

I am desperate to make this work as I have built an entire thing around the assumption that copy would work on it in iOS as well as android, but didn't test in iOS until it was finished :(

Any help would be greatly appreciated. Thanks.

edit: tested on 4.3.5 -- 4.3.2 -- IOS 5.1 -- not working
I'm afraid I can't provide simple answer to your question (like adding something in config or init), but I hope current solution will be sufficient.

**Problem**

Problem lies quite deep in the code of this framework. First of all we have a `jquery.mobile.dialog.js` file in which we have a line:

```javascript
$el.bind( "vclick submit", function( event ) {
    // code
});
```

As you can see here we are adding a binding `vclick` to the `$el` - whole dialog box container.

Event `vclick` on its own is generated by jQuery Mobile in `vmouse.js` and after digging there I managed to detect where actual problem arises:

```javascript
$( this ).bind( realType, dummyMouseHandler );
```

This line is required to make event work in some browsers, namely Opera Mini (as described in commented text above this line).

**Solution**

So, here is one of the solutions, open file `jquery.mobile.vmouse.js` and comment out line

```javascript
$( this ).bind( realType, dummyMouseHandler );
```

I've tested it on an iPad and copy functionality is available after that tiny patch.
• Reputation points
  – Receive 5 points for upvoted question
  – Receive 10 points for upvoted answer
  – Owner of question can indicate a best answer, awarding 15 points
  – Questions can have reputation point bounties, multiples of 50 points
  – Users can down-vote, costing them one point and the poster two points
• Award levels (badges) are called “Privileges”
• Examples include:
  – 1 reputation: Create post
  – 15 reputation: Vote up
  – 125 reputation: Vote down
  – 500 reputation: Retag question
  – 10,000 reputation: Moderator tools
  – 20,000 reputation: Trusted user

• A simple points and badges system
• Chart shows total questions and answers per day (y-axis) by user reputation (x-axis)
• Grey boxes represent reputation spans associated with Stack Overflow rewards
• **Reputation point system works in Stack Overflow!**

*Towards Improving Bug Tracking Systems with Game Mechanisms*
Rafael Lotufo, Leonardo Passos, Krzysztof Czarnecki, Mining Software Repos. 2012
Achievement Unlocked
15G - Survived First Chart
• (left) As answer rewards go up, probability of being resolved increases
• (right) As reputation increases, users are less likely to quit Stack Overflow

Towards Improving Bug Tracking Systems with Game Mechanisms
Rafael Lotufo, Leonardo Passos, Krzysztof Czarnecki, Mining Software Repos. 2012
Point and badge systems seem to work.

Why?

Are we so easily manipulated?

What’s going on here?
Motivational Game Design Patterns are commonly recurring parts of the design of a game that motivate some behavior in a player.

Behavior Shaping Patterns of ‘Ville Games
Chris Lewis, Noah Wardrip-Fruin, Jim Whitehead,
Behavioral theory

MGDP in ‘Ville games

MGDP in other games
Behavioral theory

MGDP in 'Ville games

MGDP in other games

Goal-gradient hypothesis

Leveling

Almost every RPG
Behavioral theory

MGDP in ‘Ville games

Fixed Interval Schedule

Harvesting

MGDP in other games

Animal Crossing’s Redd
Behavioral theory

MGDP in ‘Ville games

MGDP in other games

Sunk cost fallacy, avoidance interval schedule

Withering

Ultima Online housing
Behavioral theory

MGDP in ‘Ville games

MGDP in other games

Anchoring

Resource conversion

Microsoft Points
• Social network games tend to use multiple motivational design patterns simultaneously
  – Small numbers don’t seem to be sufficient

• Stack Overflow is only using one or two

• Are there underlying mechanisms that drive this?
MEANINGFUL INTERACTIONS

• Stack Overflow’s badges are tied to direct, tangible, real-world benefits

• Privileges give desirable control over questions and answers, wikis, tags
  – Ability to improve answer rate
  – Ability to improve site quality

• High reputation is also a proxy for strong developer knowledge
  – Valuable for employment opportunities
Gamification seems to work well when rewards are tied to meaningful real-world benefits for players/users.

Put differently, Stack Overflow users allow themselves to be manipulated because they see individual and collective benefit to doing so.
• Corporatized gamification has an overt Taylorist agenda of fine-grain measurement of standardized labor to improve efficiency.
• Stack Overflow does this too, but its rewards co-opt the users into management, and give substantial (but by no means complete) control over the means of production of the site.

Frederick W. Taylor
• Gamification holds the ideal promise of being able to spread gaming pixie dust over ordinary work activities to make them more engaging.

• Recall the mother using Chore Wars
For long-term success, gamification efforts need to engage in co-design of:

- Reward systems
  - To emphasize desired outcomes
- Work structure and environment
  - To ensure rewards are tied to meaningful real-world outcomes
  - May involve redesigning the work task itself
  - Echoes of Frederick Hertzberg’s two-factor theory of workplace motivation:
    - Motivators (challenging work, responsibility) vs.
    - Hygiene factors (status, job security, salary)
• Imagine call center gamification
  – Good: At certain reward levels, increasing control is granted over operations
    • Ability to monitor and critique call handling
    • Ability to vote up/down (later, to edit) database of facts used to handle calls
  – Better: Understand career trajectory desires of workers and build that in
    • Higher reward levels start process of training for higher level jobs
    • Control scheduling
    • Suggest edits to call scripts
    • Analysis of call statistics
    • Go to training classes
CHANGING THE WORK ITSELF

- Successful gamification can require changing the nature of the work itself
- Fold-It protein folding game (fold.it)
  - Required simplification of protein folding
  - Required structuring the protein folding task as a form of physical movement puzzle
  - Focus on **playful interaction** with the task
SUMMARY

• Gamification works best when connected to meaningful, real-world rewards
• Behavioral psychology/economics provides a lens for understanding motivational game design patterns
• A key question in gamification efforts is developing these real-world rewards
  – This may involve workplace alterations to provide rewards of control over work
  – Focus on playful interactions
Achievement Unlocked
50G - Endured Jim's Talk

http://www.justachieveit.com/